DOE/LANL LIST OF LOS ALAMOS NATIONAL LABORATORY NUCLEAR FACILITIES

U.S. Department of Energy
Los Alamos Area Office

Los Alamos National Laboratory
Environment, Safety, & Health Division

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APPROVED FOR USE	
David J. Seidel LANL ESH-3 Group Leader	April 26, 2000 Date
LAAO Senior Authorization Basis Manager	4/26/00 Date
David A. Dunlap LAAO Area Manager	4/26/00 Date

Changes in Nuclear Facility Status

Date	Description
3/97	Omega West Reactor (OWR), TA-2-1, downgraded from hazard category 2 reactor facility to a radiological facility. OWR removed from the nuclear facilities list.
9/98	Safety Analysis Report (SAR) approved accepting the Radioactive Materials, Research, Operations, and Demonstration Facility (RAMROD), TA-50-37, as a hazard category 2 nuclear facility. RAMROD added to the nuclear facilities list.
9/98	TA-35 Buildings 2 and 27 downgraded from a hazard category 2 nuclear facility to a hazard category 3 nuclear facility.
9/98	Basis of Interim Operations (BIO) approved accepting the Los Alamos Neutron Science Center (LANSCE) A-6 Isotope Production and Materials Irradiation and 1L Manual Lujan Neutron Scattering Center (MLNSC) Target Facilities as hazard category 3 nuclear facilities.
10/98	TA-8 Radiography Facility Buildings 24 and 70 downgraded from hazard category 2 nuclear facilities to radiological facilities.
11/98	Health Physics Calibration Facility (TA-3 SM-40, SM-65 and SM-130) downgraded from a hazard category 2 nuclear facility to a radiological facility. SM-40 and SM-65 had been hazard category 2 nuclear facilities while SM-130 had been a hazard category 3 nuclear facility. Health Physics Calibration facility removed from the nuclear facilities list.
12/98	Radioactive Liquid Waste Treatment Facility (RLWTF) downgraded from a hazard category 2 nuclear facility to a hazard category 3 nuclear facility.
1/99	Pion Scattering Experiment of the TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE) removed from the nuclear facilities list.
1/99	Operations of Building TA-18-248, School House, of the TA-18 LANL Critical Experiment Facility (LACEF) and Hillside Vault moved to the Chemistry and Metallurgy Research (CMR) Building.
2/00	Building TA-50-190, Liquid Waste Tank, of the Waste Characterization Reduction and Repackaging Facility (WCRRF) removed from the nuclear facilities list.
3/00	DOE SER clarifies segmentation of the Waste Characterization Reduction and Repackaging Facility (WCRRF) as: 1) Building TA-50-69 designated as a hazard category 3 nuclear facility, 2) an outside operational area designated as a hazard category 2 nuclear facility, and 3) the Non-Destructive Assay (NDA) Mobile Facilities located outside TA-50-69 and designated as a hazard category 2 nuclear facility.
4/00	Building TA-3-159 of the TA-3 SIGMA Complex downgraded from hazard category 3 nuclear facility to a radiological facility and removed from the nuclear facilities list.
4/00	TA-35 Nonproliferation and International Security Facilities Buildings 2 and 27 downgraded from hazard category 3 nuclear facilities to radiological facilities and removed from the nuclear facilities list.

FOREWORD

1. This joint Department of Energy (DOE) Los Alamos Area Office (LAAO) and Los Alamos National Laboratory (LANL) Environment, Safety, & Health (ESH) Division document has been prepared by the LAAO Safety Analysis Team and the Facility Risk Management Group (ESH-3) at LANL. This document provides a tabulation and summary information concerning hazard category 2 and 3 nuclear facilities at LANL.

2. This nuclear facility list will be updated to reflect changes in facility status caused by inventory reductions, final hazard classifications, exemptions, facility consolidations, and other factors.

3. DOE-STD-1027-92 methodologies are the bases for identifying nuclear facilities to be included in this standard. LAAO should be made aware of conflicts between this documents and other documents that identify nuclear facilities to ensure that nuclear facilities are appropriately identified and that an appropriate set of requirements are being implemented.

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1. SCOPE

Standard DOE-STD-1027-92, Change 1, "Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports," provides methodologies for the hazard categorization of DOE facilities based on facility material inventories and material at risk. This document lists hazard category 2 and 3 nuclear facilities since they must comply with requirements in 5480.21, .22, and .23. LANL nuclear facilities that are below hazard category 3 (radiological facilities) have not been included on this list since they are exempt the requirements in 5480.21, .22, and 23.

2. PURPOSE

This standard provides a list of hazard category 2 and 3 nuclear facilities at the Los Alamos National Laboratory (LANL). The list will be revised, as appropriate, to reflect changes in facility status resulting from final hazard categorization or movement, relocation, or final disposal of radioactive inventories. The list shall be used as the basis for determining initial applicability of DOE nuclear facility requirements.

3. APPLICABILITY

This standard is intended for use by all AL divisions, area offices, and contractors with responsibilities for facility operation and/or oversight at LANL.

4. REFERENCES

1. DOE Order 5480.23, *Nuclear Safety Analysis Reports*, USDOE, 3/10/94.

2. DOE Order 420.2, Change 1, *Safety of Accelerator Facilities*, USDOE, 5/26/99.

3. DOE-STD-1027-92, Change 1, *Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports*, USDOE, 9/97.

5. NUCLEAR FACILITIES LIST

Table 5-1 identifies all hazard category 2 and 3 nuclear facilities at LANL. Facilities have been categorized based on criteria in DOE-STD-1027-92, change 1. Each facility is identified by site, zone or area, building number, name, and dominant hazard category. The dominant hazard category was determined by identifying the highest hazard category for multi-process facilities. Buildings, structures, and processes addressed by a common safety analysis report have been designated as a single facility.

DOE-STD-1027-92, Change 1, permits exclusion of sealed radioactive sources from a facility's inventory if the sources were fabricated and tested in accordance with 49 CFR 173.469 or ANSI N43.6. In addition, material contained in Department of Transportation Type B shipping containers may also be excluded from a facility's radioactive inventory. Facilities containing only material tested or stored in accordance with these standards do not appear in the list and tables that follow.

TABLE 1. DOE/ESH-3 List of LANL Nuclear Facilities

HAZARD CATEGORY	FACILITY NAME	TABLE	PAGE NUMBER
2	TA-3 Chemistry and Metallurgy Research (CMR) Facility	1-1	5
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2	TA-54 Transuranic Waste Inspectable Storage Project (TWISP)	1-16	10
3	TA-54 Radioactive Assay Nondestructive Testing (RANT) Facility	1-17	11
2	TA-55 Plutonium Facility	1-18	11

Summary: 13 Hazard Category 2 Nuclear Facilities, 5 Hazard Category 3 Nuclear Facilities, 18 Total Nuclear Facilities

6. LANL NUCLEAR FACILITIES SUMMARY TABLES

The following tables summarize authorization basis information for each nuclear facility identified in Table 5-1.

TABLE 1-1. LANL TA-3 Chemistry and Metallurgy Research Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-3 Chemistry and Metallurgy Research (CMR) Bldg.** FACILITY FM: Eric Ernst		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-3	0029	Radiochemistry hot cell facility	2
TA-3	0029	CMR SNM Vault	2
TA-3	0029	CMR NDA/NDE waste assay; inspection of waste drums	2
TA-3	0029	Classroom for IAEA inspectors; a.k.a. "School House"	2
TA-3	0029	Enriched Uranium foundry & machining; operation shutdown; (Wing 9)	2
Current Authorization Basis: BIO, Management Evaluation Report (MER) approval dated 8/31/98. Interim TSRs (revision to 1998 ITSRs), DOE approval dated 12/21/99.			

TABLE 1-2. LANL TA-3 SIGMA Complex Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-3 SIGMA Complex** FACILITY FM: Lisa Woodrow		HAZ CAT: **3**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-3	0066	Storage of 44 MT DU.	3
Current Authorization Basis: 2/28/00 memo to Chris Steele from Lisa Woodrow requesting that Memorandum of Understanding serve as Interim Authorization Basis until inventory reduced below nuclear facility threshold.			

TABLE 1-3. LANL TA-8 Radiography Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-8 Radiography Facility** FACILITY FM: Robert Grace		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-8	0022	Radiography facility; radiographs of nuclear explosives assemblies and other sources exceed HC-2 threshold values	2
TA-8	0023	Radiography facility; radiographs of nuclear explosives assemblies and other sources exceed HC-2 threshold values	2
NOTE: Official request for removal from Haz Cat. 2 List. Current Authorization Basis: Draft SA under development. Graded SAR required if nuclear status is preserved.			

TABLE 1-4. LANL TA-16 Weapons Engineering Tritium Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-16 Weapons Engineering Tritium Facility (WETF)** FACILITY FM: Robert Grace Facility Operations: Jim Tingey		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-16	0205	Weapons related tritium research	2
Current Authorization Basis: SAR, DOE Approval dated 11/5/90. SAR Addendum for WETF addition, DOE SER approval dated 4/26/95. OSRs, DOE approval dated 9/8/95.			

TABLE 1-5. LANL TA-16 Assembly Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-16 Assembly Facility** FACILITY FM: Robert Grace		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-16	0411	Intermediate device assembly building	2
Current Authorization Basis: SAR and TSRs, DOE SER approval dated 7/30/97.			

TABLE 1-6. LANL TA-18 Critical Experiment Facility and Hillside Vault Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-18 LANL Critical Experiment Facility (LACEF) and Hillside Vault** FACILITY FM: Phil Pellette		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-18		Critical Experiment Site	2
TA-18	0023	Category 1 SNM Vault (Kiva 1)	2
TA-18	0026	Hillside Vault (Parajito Site); contains SNM >HC-2 threshold	2
TA-18	0032	Category 1 SNM Vault (Kiva 2)	2
TA-18	0116	Assembly building (Kiva 3)	2
TA-18	0127	Accelerator used for weapons X-ray	2
TA-18	0129	Calibration laboratory	2
TA-18	0247	Sealed sources >HC-3 threshold values; not ANSI certified	3
Current Authorization Basis: SAR, DOE SER approval dated 2/23/95. TSRs, DOE SER approval dated 11/21/95.			

TABLE 1-7. LANL TA-21 Tritium Science and Fabrication Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-21 Tritium Science and Fabrication Facility (TSFF)** FACILITY FM: Robert Grace Facility Operations: Jim Tingey		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-21	0209	Support for underground testing program >HC-2 threshold; tritium	2
Current Authorization Basis: SA, DOE approval dated 4/9/87. OSRs (revision to 1988 OSRs), DOE approval dated 8/28/96.			

TABLE 1-8. LANL TA-21 Tritium System Test Assembly Facility Summary

SITE: **LANL**			
CSO: **ER**	FACILITY: **TA-21 Tritium System Test Assembly (TSTA)** FACILITY FM: Robert Grace Facility Operations: Jim Tingey		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-21	0155	Tritium research; >HC-2 threshold	2
Current Authorization Basis: SAR (includes OSRs), DOE approval dated 8/5/96 (DOE O 5481.1B SAR approved for use as a BIO).			

TABLE 1-9. LANL TA-33 High Pressure Tritium Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-33 High Pressure Tritium Facility** FACILITY FM: Robert Grace		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-33	0086	Former tritium research facility	2
Current Authorization Basis: OSRs, DOE approval dated 7/21/88.			

TABLE 1-10. LANL TA-48 Radiochemistry and Hot Cell Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-48 Radiochemistry and Hot Cell Facility** FACILITY FM: Sara Helmick		HAZ CAT: **3**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-48	0001	Radiochemistry and hot cell facility; multiple small sources >HC-3 threshold values	3
Current Authorization Basis: No approved nuclear authorization basis exists. DOE LAAO direction to develop JCO by 4/00 followed by BIO and SAR.			

TABLE 1-11. LANL TA-50 Radioactive Waste Treatment Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF)** FACILITY FM: Dennis McLain Team Lead: Rick Alexander		HAZ CAT: **3**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-50	0001	Main treatment plant, pretreatment plant, decontamination operation	3
TA-50	0002	Low level liquid influence tanks, treatment effluent tanks, low level sludge tanks	3
TA-50	0066	Acid and Caustic waste holding tanks	3
TA-50	0090	Holding tank	3
Current Authorization Basis: SAR, DOE SER approval dated 12/26/95. Interim TSRs, DOE approval dated 3/16/99.			

TABLE 1-12. LANL TA-50 Radioactive Materials, Research, Operations, and Demonstration Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-50 Radioactive Materials, Research, Operations, and Demonstration (RAMROD)** FACILITY FM: Sara Helmick		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-50	0037	Radioactive materials, research, operations, and demonstration facility	2
Current Authorization Basis: SAR and TSRs, DOE SER approval dated 9/15/98.			

TABLE 1-13. LANL TA-50 Waste Characterization Reduction and Repackaging Facility Summary

SITE: **LANL**			
CSO: **EM**	FACILITY: **TA-50 Waste Characterization Reduction and Repackaging Facility (WCRRF)** FACILITY FM: Sara Helmick		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-50	0069	Waste characterization, reduction, and repackaging facility	3
TA-50		NDA mobile activities outside TA-50-69	2
TA-50		Drum staging/storage pad and waste container temperature equilibration activities outside TA-50-69	2
Current Authorization Basis: BIO (includes Controls), DOE SER approval dated 3/16/00.			

TABLE 1-14. LANL TA-53 Nuclear Activities at Los Alamos Neutron Science Center Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE)** FACILITY FM: James Fraser		HAZ CAT: **3**
ZONE	ACTIVITY	DESCRIPTION	HAZ. CAT.
TA-53	A-6	APT target, isotope production, beam stop	3
TA-53	ER1	Actinide scattering experiment	3
TA-53	1L	Manual Lujan Neutron Scattering Center	3
Current Authorization Basis: BIO (includes Controls), DOE SER approval dated 12/22/99.			

TABLE 1-15. LANL TA-54 Waste Storage and Disposal Facility Summary

SITE: **LANL**			
CSO: **DP/EM**	FACILITY:**TA-54 Waste Storage and Disposal Facility (WSDF)** FACILITY FM: Dennis McLain Team Lead: Steve Mee		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-54	Area G	Low level waste (LLW) (including mixed waste) storage and disposal in domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Low level disposal of asbestos in pits and shafts. Operations building; TRU waste storage	2
TA-54	0002	Radioactive and chemical waste storage; fabric dome with TRU	3
TA-54	0048	waste drum storage	3
TA-54	0049	Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3
TA-54	0153	Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3
Current Authorization Basis: SAR and TSRs, DOE SER approval dated 9/19/95.			

TABLE 1-16. LANL Transuranic Waste Inspectable Storage Project Summary

SITE: **LANL**			
CSO: **EM**	FACILITY: **TA-54 Transuranic Waste Inspectable Storage Project (TWISP)** FACILITY FM: Dennis McLain Team Lead: Steve Mee		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-54		TRU waste remediation project for pads 1, 2, & 4. TRU waste placement (incidental to remediation) in Bldgs. 226, 229, 230, 231, & 232.	2
Current Authorization Basis: SAR and TSRs, DOE SER approval dated 10/3/96.			

TABLE 1-17. LANL TA-54 Radioactive Assay Nondestructive Testing Facility Summary

SITE: **LANL**			
CSO: **EM**	FACILITY: **TA-54 Radioactive Assay Nondestructive Testing (RANT) Facility** FACILITY FM: Sara Helmick		HAZ CAT: **3**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-54	0038	Nondestructive assay and examination of waste drums, WIPP certification of TRU waste drums, TRUPACT loading of drums.	3
Current Authorization Basis: SA and Interim OSRs, DOE approval dated 2/12/98			

TABLE 1-18. LANL TA-55 Plutonium Facility Summary

SITE: **LANL**			
CSO: **DP**	FACILITY: **TA-55 Plutonium Facility** FACILITY FM: Deidra Yearwood FM DESIGNEE: Tom Blum		HAZ CAT: **2**
ZONE	BUILDING	DESCRIPTION	HAZ. CAT.
TA-55	0004	Pu glovebox line; Pu-238 processing	2
Current Authorization Basis: IFIT Facility SAR, DOE SER approval dated 6/19/96. TA-55 SAR, DOE SER approval dated 1/13/97. ARIES SAR Addendum, DOE approval dated 9/28/98. TA-55 TSRs, DOE approval dated 10/29/99.			

LANL NUCLEAR FACILITIES SAFETY AUTHORIZATION BASES DOCUMENTS

Facility Name	Laboratory Documents	DOE Documents
Chemistry and Metallurgy Research (CMR) Facility, TA-3	***CMR Basis for Interim Operations*, dated August 26, 1998.** **NMT13-TSR-002, R01, *Control and Execution of CMR Safety System LCOs and Surveillances*, dated December 3, 1998. (Interim TSRs)** **NMT13-TSR-002, R02, *CMR Interim Technical Safety Requirements*, dated December 20, 1999.**	***Management Evaluation Report for the Chemistry and Metallurgy Research (CMR) Facility Basis for Interim Operations (BIO),* dated August 1998.** **Memorandum from Glenn (LAAO) to Matthews(LANL), dated August 31, 1998 (approval of BIO).** **Memorandum from Gurule (LAAO) to Matthews(LANL), *Approval of CMR Facility Interim Technical Safety Requirements (ITSRs)*, dated December 11, 1998.** **Memorandum from Steele (LAAO) to George (LANL), *Approval of Modified CMR Interim Technical Safety Requirements (ITSRs) in Response to Incorrectly Derived Conditions of Operability for the Safety Class Facility Fire Suppression Syste*m, dated December 21, 1999.**
SIGMA Complex, TA-3	**No DOE approved nuclear authorization basis exists.**	**N/A**
Radiography Facility, TA-8	**No DOE approved nuclear authorization basis exists.**	**N/A**

Facility Name	Laboratory Documents	DOE Documents
Weapons Engineering Tritium Facility (WETF), TA-16	**WETF-89-001, Rev. 1, *The Weapons Engineering Tritium Facility Safety Analysis Report*, dated June 27, 1989.** ***Final Safety Analysis Report (FSAR) Addendum for Weapons Engineering Tritium Facility Addition (WETF) TA-16-205 ESA-5*, dated February 20, 1995.** **WETF-OSR, Rev. 5, *Operational Safety Requirements for the Weapons Engineering Tritium Facility*, dated April 16, 1996.**	**Memorandum from Barr (DP-26) to Assistant Secretary for Defense Programs (DP-1), *Recommendation that the Final Safety Analysis Report (FSAR) for the Weapons Engineering Tritium Facility (WETF) be approved*, dated October 30, 1990 (FSAR approved by DP-1 on November 5, 1990).** **Memorandum from Twining (AL) to Kirkman (LAAO), *Safety Evaluation Report for the Final Safety Analysis Report Addendum for the Weapons Engineering Tritium Facility, LANL*, dated April 26, 1995.** **Memorandum from Rigdon (AL) to Kirkman (LAAO), *Approval of the Weapons Engineering Tritium Facility (WETF) Operational Safety Requirements (OSRs) Change*, dated September 8, 1995.** **Memorandum from Mullen (LAAO) to Burick (LANL), dated September 20, 1995 (approval of OSRs).**

Facility Name	Laboratory Documents	DOE Documents
Assembly Facility (Rest House), TA-16	**Safety Analysis Report for the Dynamic Experiments, dated April 1996.** **Technical Safety Requirements for the Dynamic Experiments.**	**Safety Evaluation Report (SER) of the LANL Dynamic Experiments Safety Analysis Report (SAR) and Technical Safety Requirements (TSRs), dated July 14, 1997.** **Memorandum from Reis (DP-1) to Manager, Albuquerque Operations Office, Transmittal of the Approval of the Safety Evaluation Report for the LANL Dynamic Experiments, dated July 30, 1997.**

Facility Name	Laboratory Documents	DOE Documents
Los Alamos Critical Experiment Facility (LACEF) and Hillside Vault, TA-18	***Safety Analysis Report for the Los Alamos Critical Experiments Facility (LACED) and Hillside Vault (PL-26), TA-18, NIS-6*, dated June 1994.** **LA-CP-95-11, Revision 1.0, *Technical Safety Requirements for the Los Alamos Critical Experiments Facility and the Hillside Vault*, dated September 1995.**	***DOE Albuquerque Operations Office Safety Evaluation Report Los Alamos Critical Experiments Facility*, dated January 1995.** **Memorandum from Twining (AL) to Kirkman (LAAO), *Approval of Los Alamos Critical Experiments Facility (LACEF) Safety Analysis Report (SAR)*, dated February 23, 1995.** ***Safety Evaluation Report Los Alamos Critical Experiments Facility and the Hillside Vault (LACEF) Technical Safety Requirements (TSRs)*, LA-CP-95-11, dated November 1995.** **Memorandum from Twining (AL) to Kirkman (LAAO), *Approval, Los Alamos Critical Experiments Facility and Hillside Vault (LACEF) at TA-18 Technical Safety Requirements (TSRs)*, dated November 21, 1995.**

Facility Name	Laboratory Documents	DOE Documents
Tritium Science and Fabrication Facility (TSFF), TA-21	**Report No. SA 86-2, *Safety Assessment for the Tritium Salt Facility TA-21-209*, dated June 1986, revised February 1987.** **TSF-OSR, Rev. 3, *Operational Safety Requirements for the Tritium Science and Fabrication Facility*, dated November 27, 1996. (revision of 1988 OSRs).**	**Memorandum from Schinkle (AL) to Valencia (LAAO), *Safety Assessment, Tritium Salt Facility, TA-21-209, LANL*, dated April 9, 1987 (found LANL response to AL comments to be satisfactory).** **Memorandum from Phoenix (LAAO) to Hurdle (LANL) dated April 17, 1987 (not an actual approval memorandum of Safety Assessment).** **Memorandum from Schinkle (AL) to Valencia (LAAO), *Approval of Non-reactor Nuclear Facility Operational Safety Requirements (OSRs)*, dated November 29, 1988 (approved OSRs).** **Memorandum from Roybal (AL) to Todd (LAAO), *Proposed Revisions to the Operational Safety Requirements (OSRs) for the Tritium Science and Fabrication Facility (TSFF*), dated August 28, 1996 (approval of proposed revisions to OSRs).**
Tritium Systems Test Assembly (TSTA) Facility, TA-21	***Final Safety Analysis Report for Tritium Systems Test Assembly (TSTA) TA-21-155, ESA-TSE*, dated April 1996. (Chapter 8 contains OSRs)**	Memorandum from Twining (AL) to Todd (LAAO) *Approval of Tritium System Test Assembly (TSTA) Safety Analysis Report (SAR)*, dated August 5, 1996 (DOE O 5481.1B SAR approved for use as a BIO).

Facility Name	Laboratory Documents	DOE Documents
High Pressure Tritium Facility, TA-33	***Operational Safety Requirements for the High Pressure Tritium Facility, TA-33-86*, dated June 1988.**	**Memorandum from Valencia (LAAO) to Tiedman (LANL), *Approval of Non-Reactor Nuclear Facility Operational Safety Requirements (OSR) Reference: HSE-1-88-96*, dated July 21, 1988.**
Radiochemistry and Hot Cell Facility, TA-48	**No DOE approved nuclear authorization basis exists.**	**N/A**
Radioactive Liquid Waste Treatment Facility (RLWTF), TA-50	**WASTE MGMT-REPORT-002, R.0, *TA-50 Waste Management Operations, Safety Analysis Report, Volume I, Information common to All Facilities*, dated October 1995.** **LW-CST-13-AP13-R0, *Final Safety Analysis Report for Radioactive Liquid Waste Treatment Facility at TA-50-1*, *Information Specific to the Radioactive Liquid Waste Treatment Facility, Volume III*, October 1995.** **AP-FMU84-02, R.0, *Interim Technical Safety Requirements (ITSRs) Radioactive Liquid Waste Treatment Facility TA-50: Buildings 1, 2, 66, 90, and 114*, dated March 16, 1999.**	***Safety Evaluation Report for Los Alamos National Laboratory Technical Area 50 Radioactive Liquid Waste Treatment Facility SAR/TSRs*, dated November 1995.** **Memorandum from Twining (AL) to Kirkman (LAAO), *Approval of Safety Analysis Report (SAR)/Technical Safety Requirements (TSRs) for LANL TA-50-1, Radioactive Liquid Waste Treatment Facility (RLWTF)*, dated December 26, 1995.** Memorandum from Gurule (LAAO) to Baca (LANL), *Conditional Approval of Interim Technical Safety Requirements (ITSRs) for the Radioactive Liquid Waste Treatment Facility (RLWTF) Located at TA-50-1, -2, -66, and –114*, dated March 16, 1999.

Facility Name	Laboratory Documents	DOE Documents
Radioactive Materials, Research, Operations, and Demonstration (RAMROD) Facility, TA-50	**RAMROD-REPORT-001, R.0, *Safety Analysis Report for the Radioactive Materials Research, Operations, and Demonstration (RAMROD) Facility TA-50-37*, dated August 31, 1998.** **RAMROD/TSR/Rev.0, *Technical Safety Requirements, Radioactive Materials Research , Operations and Demonstration (RAMROD) Facility*, dated September 10, 1998.**	*Safety Evaluation Report for RAMROD-SER-Rev. 0, Final Safety Analysis Report and Technical Safety Requirements for the Radioactive Materials, Research, Operations, and Demonstration (RAMROD) Facility at TA-50-37, RAMROD-SAR-Rev. 0, August 31, 1998, RAMROD-TSRs-Rev. 0, September 9, 1998*, dated September 10, 1998. Memorandum from Zamora (LAAO) to Gancarz (LANL), *Transmittal of Safety Evaluation Report (SER) Approving the new RAMROD Final Safety Analysis Report (FSAR) and Technical Safety Requirements (TSRs)*, dated September 15, 1998.
Waste Characterization Reduction and Repackaging Facility (WCRRF), TA-50	***Waste Characterization, Reduction, and Repackaging Facility (WCRRF) Interim Technical Safety Requirements (ITSRs)*, TA-50-69, Rev. 0, February 15, 2000. (Includes a Hazard Analysis)**	***Safety Evaluation Report (SER) for Waste Characterization, Reduction, and Repackaging Facility (WCRRF) Interim Technical Safety Requirements (ITSRs), TA-50-69, Rev. 0, February 15, 2000,* dated March 13, 2000. (ITSRs/HA approved as a BIO)** **Memorandum from Steele (LAAO) to Sattelberger (LANL), *Transmittal of Safety Evaluation Report (SER) for the Waste Characterization, Reduction, and Repackaging Facility (WCRRF) Interim Technical Safety Requirements (ITSR) and Hazard Analysis,* dated March 16, 2000.**

Facility Name	Laboratory Documents	DOE Documents
Nuclear Activities at LANSCE, TA-53	**BIO-53-004, Rev. 1, *Basis for Interim Operation (BIO) for the 1L Target 2000 – 2002 Beam Delivery Periods*, dated December 10, 1999.**	***Safety Evaluation Report (SER) for the LANSCE (TA-53) 1L Target-BIO, Rev.0*, dated December 21, 1999.** **Memorandum from Steele (LAAO) to Pynn (LANL), *Safety Evaluation Report (SER) for the Basis for Interim Operation (BIO) for the 1L Target, 2000 – 2002 Beam Delivery Periods, December 10, 1999, TA-53-BIO-004, Rev. 1*, dated December 22, 1999.**
Waste Storage and Disposal Facility, TA-54	**CST14G-REPORT-003, R.0, *Safety Analysis Report (SAR) for TA-54, Area G*, dated August 30, 1995.** **CST14G-REPORT-009, R.0, *Technical Safety Requirements (TSRs) for TA-54, Area G*, August 30, 1995.**	*Safety Evaluation Report for Los Alamos National Laboratory Technical Area 54, Area G Facility FSAR/TSR*, September 1995. Memorandum from Twining (AL) to Kirkman (LAAO), *Approval of Safety Analysis Report (SAR)/Technical Safety Requirements (TSRs) for Los Alamos National Laboratory (LANL) TA-54, Area G, Los Alamos, New Mexico*, dated September 19, 1995.
Transuranic Waste Inspectable Storage Project (TWISP), TA-54	**REPORT-54G-011, R.0, *SAR for the Retrieval of TRU Waste from Pads 1, 2, and 4 at TA-54, Area G*, dated August 21, 1996.** **REPORT-54G-012, R.0, *TSRs for the Retrieval of TRU Waste from Pads 1, 2, and 4, at TA-54, Area G*, dated August 21, 1996.**	***Safety Evaluation Report for Los Alamos National Laboratory Final Safety Analysis Report and Technical Safety Requirements for the Retrieval of Transuranic Waste from Pads 1, 2, and 4 at TA-54, Area G*, dated September 1996.** **Memorandum from Twining (AL) to Todd (LAAO), *Approval of Final Safety Analysis Report/Technical Safety Requirements for the Retrieval of Transuranic Waste Pads 1, 2, and 4 at TA-54, Area G, Los Alamos National Laboratory, Los Alamos, New Mexico*, dated October 3, 1996.**

Facility Name	Laboratory Documents	DOE Documents
Radioactive Assay Nondestructive Testing (RANT) Facility, TA-54	***Safety Assessment, Los Alamos National Laboratory Radioassay and Nondestructive Testing (RANT) Facility, TA-54 West*, Revision 4, February 1998** ***Interim Operational Safety Requirements, Los Alamos National Laboratory Radioassay and Nondestructive Testing (RANT) Facility, TA-54-West*, Revision 4, dated February 1998**	**Memorandum from Le-Doux (LAAO) to Gancarz (LANL), *Approval of Revised Safety Assessment (SA) and Operational Safety Requirements (OSRs) for the Radioassay and Nondestructive Testing (RANT) Facility, TA-54-38*, dated February 12, 1998.**

Facility Name	Laboratory Documents	DOE Documents
Plutonium Facility, TA-55	***Isotopic Fuel Impact Test (IFIT) Facility FSAR Supplement,* Rev. 3, dated May 31, 1996.**	Safety Evaluation Report for Los Alamos National Laboratory TA-55 Final Safety Analysis Report Supplement and Operational Safety Requirements Revision Isotopic Fuel Impact Test (IFIT) Facility, *dated June 1996*.
	TA-55-PRD-108-01.1, *TA-55 Final Safety Analysis Report,* dated August 16, 1996.	*Memorandum from Twining (AL) to Todd (LAAO),* Approval of the Final Safety Analysis Report (FSAR) Supplement for the Isotopic Fuels Impact Test (IFIT) Facility and Revised Operational Safety Requirements (OSRs) at TA-55, *dated June 19, 1996.*
	Advanced Recovery and Integrated Extraction System (ARIES) Project Hazard Analysis and Required Safety Controls FSAR Addendum, September 28, 1998.	***Safety Evaluation Report of the Los Alamos National Laboratory Technical Area 55 Plutonium Building-4, Safety Analysis Report and Technical Safety Requirements*, dated December 1996.**
	TA-55-PED-108-01.1, Revision 1*, TA-55 Technical Safety Requirements,* dated August 13, 1999.	**Memorandum from Reis (DP-1) to Manager, Albuquerque Operations Office, *Transmittal of Approval of the Safety Evaluation Report for the Los Alamos National Laboratory, Technical Area-55, Plutonium Facility*, dated January 13, 1997.**
		Memorandum from Gurule (LAAO) to Matthews (LANL), *Approval of AIRES Project Hazard Analyses and Required Safety Controls*, dated September 28, 1998.
April 2000	**19**	**Memorandum from Steele (LAAO) to Christensen (LANL), *Approval of TA-55 Technical Safety Requirements*, dated**

Note 1: Positive USQs approved by DOE are not included in this listing.

Note 2: A recent LANL self-assessment indicated that the authorization basis documents for 8 of the 9 nuclear facilities with the oldest DOE approved documents had significant deficiencies. Several nuclear facilities (e.g., TA-55, CMR, and RAMROD) were excluded from the review because they have authorization basis documents prepared recently. The new FY00 Appendix F Performance Measures contain a schedule for upgrading the authorization basis documents for 6 nuclear facilities to include a quality assurance process for reviewing authorization basis documents.